SPECIAL AIRWORTHINESS INFORMATION BULLETIN

Aircraft Certification Service
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www.faa.gov/certification/aircraft

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin alerts you, owners and operators of **Textron Lycoming Corp. AEIO-360-A1B6, -A1E, and -H1B model engines** with specific engine serial numbers, of the need to check the length of the suction screen installed in the engine prior to inverted flight and no later than the next scheduled oil change (50 hours).

Background

Lycoming has issued Mandatory Service Bulletin (MSB) No. 564 (attached) listing the serial numbers of 22 aerobatic engines that may have had the incorrect oil suction screen installed. Lycoming uses two different length oil suction screens: A long screen, P/N 70484, which is 4.5 inches long, and a short screen, P/N LW-13888, which is 3.81 inches long. If a short screen is installed in an application designed for a long screen, the screen will not hold the sump plug in the sump, the sump plug will work loose from the sump and cause a loss of oil pressure during inverted flight. If the inverted flight is long enough, the sump plug installed in the oil pickup of the engine sump will loosen. This will allow air from the engine sump to mix with the oil from the oil valve, resulting in a loss of oil pressure and possible engine failure. Returning the aircraft to a normal altitude will return the oil pressure to normal.

Recommendation

Perform the inspection specified in Lycoming MSB No. 564.

For Service Bulletin Copies, Contact

Lycoming, 652 Oliver St, Williamsport, PA 17701, phone: (570) 323-6181; fax: (570) 327-7101; or go to their website: http://www.lycoming.textron.com/main.jsp?bodyPage=support/publications/maintenancePublications/serviceBulletins.html and click on SB 564.

For Further Information, Contact

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MANDATORY SERVICE BULLETIN

DATE: December 10, 2004 Service Bulletin No. 564

SUBJECT: Inspection of Suction Screen Length

MODELS AFFECTED: Lycoming AEIO-360-A1B6, -A1E, -H1B model engines listed below in Table.

TIME OF COMPLIANCE: Prior to any inverted flight but no later than next scheduled oil change (50 hours).

Lycoming has received a report of the incorrect oil suction screen being installed in some aerobatic engines. This will result in the plug installed in the oil suction pick up to become loose resulting in a loss of oil pressure during inverted flight.

Remove the oil suction screen and measure for correct length. The correct oil suction screen should be P/N 70484 and the length should be 4.50". If incorrect screen is found, ensure the P/N LW-13752 plug is properly installed in the oil suction passage; install the correct P/N 70484 screen.

Table

Engine Model	Engine S/N	Engine Model	Engine S/N
AEIO-360-A1B6	L-31504-51A	AEIO-360-H1B	L-31516-51A
AEIO-360-A1E	L-31685-51A	AEIO-360-H1B	L-31517-51A
AEIO-360-H1B	L-31425-51A	AEIO-360-H1B	L-31519-51A
AEIO-360-H1B	L-31426-51A	AEIO-360-H1B	L-31520-51A
AEIO-360-H1B	L-31436-51A	AEIO-360-H1B	L-31521-51A
AEIO-360-H1B	L-31459-51A	AEIO-360-H1B	L-31522-51A
AEIO-360-H1B	L-31470-51A	AEIO-360-H1B	L-31558-51A
AEIO-360-H1B	L-31497-51A	AEIO-360-H1B	L-31593-51A
AEIO-360-H1B	L-31502-51A	AEIO-360-H1B	L-31608-51A
AEIO-360-H1B	L-31503-51A	AEIO-360-H1B	L-31614-51A
AEIO-360-H1B	L-31513-51A	AEIO-360-H1B	L-31625-51A